Electronic Forms

Definition

– When electronic forms are designed to be completed on-line, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues

Issue

The interaction between form controls and screen readers can be unpredictable, depending upon the design of the page containing these controls. Accessibility problems occur when web developers separate a form element from its associated label or title.

Example 1

```
- <FORM>
  <TABLE>
   <TR>
    <TD><B>FIRST NAME: </B></TD>
    <TD><INPUT TYPE="TEXT"
        NAME="FIRSTNAME"> </TD>
    </TR>
  </TABLE>
  <INPUT TYPE="SUBMIT" VALUE="SUBMIT">
 </FORM>
```

Example 1 (cont)

First Name:

Visually this looks correct. Reviewing the code you will notice that "First Name" and the textbox are in two separate data cells. An assistive technology device may or may not associate the "First Name" to the textbox.

Example 2

```
- <FORM>
   <TABLE>
    \langle TR \rangle
    <TD><B>FIRST NAME: </B></TD>
   </TR>
   <TR>
     <TD><INPUT TYPE="TEXT"
        NAME="FIRSTNAME"> </TD>
    </TR>
  </TABLE>
   <INPUT TYPE="SUBMIT" VALUE="SUBMIT">
 </FORM>
```

Example (cont)First Name

This example shows a common way of associating a title with a form field. Visually it looks good but the "First Name" is in a different cell and row.

- Solution
 - <LABEL> (element)
 - Definition: used to specify labels for controls
 - For (attribute)
 - Definition: explicitly associates the label being defined with another control. When present, the value of this attribute must be the same as the value of the "id" attribute of some other control in the same document. When absent, the label being defined is associated with the element's contents.

- Solution (cont)
 - Id (attribute)
 - Definition: This attribute assigns a name to an element.
 This name must be unique in a document.
 - How it works
 - The "id" gives the form control (input, select, textarea) a name
 - The "for" associates the LABEL to the form control
 - The LABEL specifies a title/label for the form control

- Solution (cont)
 - Let us put it together
 - <label for="fname_txt">First Name<</label>
 <input type="text" name="fname" id="fname-txt">
 - How does it work?
 - The screen/Braille reader gets focus on the textbox
 - Reads the "id" attribute in the textbox and locates the "for' attribute in the <LABEL>
 - Reads the text in the <LABEL></LABEL> element
 - Then reads the type of form control: "First Name Edit"

Code Example:

```
- <form>
  First Name:
    </b></label> 
  <input type="text" name="fname"
 id="fname=txt"> 
   <input type="submit" value="submit">
 </form>
```

- Code Example (cont):
 - How does it look?

First Name:

• As you may notice, it looks exactly the same as Example 1. The difference now is the screen/Braille reader can accurately read the associated label to the form control.

Common Errors

- Putting a space between words for the "id" and "for" attributes
 - id="fname txt" for="fname txt"
 - Spaces are not allowed, use the underscore character
- "id" and "for" values do not match
 - id="fname_txt" for="fnam_txt"

- Common Errors (cont)
 - Missing "id" in form element
 - Missing "for" in <label> element
 - When absent, the label being defined is associated with the element's contents
 - Associating a <label> element with one "for" statement to multiple form controls
 - Missing <label> element

- Common Errors (cont)
 - Coding Errors
 - Example 1

```
<label for="label_for_mw2"> </label>
  <input type="text" id="label_for_mw2"
name="mw2">
```

 Textbox has a label of space. Screen\Braille reader will say "Space Edit"

- Common Errors (cont)
 - Coding Errors (cont)
 - Example 2<label >First Name</label><input type="text" name="mw2">
 - The <label> element is only associated to its element content, "First Name". There is no association to the form control.

- Tip
 - You have a form that looks like this
 Telephone Number:
 - How do I place <label> elements?
 - You could put them somewhere on the page and make the text the same as the background and very small font size (Not Recommended)
 - Or, you could use the TITLE attribute

- Tip (cont)
 - TITLE attribute
 - Offers advisory information about the element for which it is set.
 - Audio user agents may speak the title information in a similar context.
 - At this time, for use only with <input> type elements (text, checkbox, radio)

Tabindex

- Definition
 - Specifies the position of the current element in the tabbing order for the current document
- Use
 - Provide users with mobility issues a way to access form elements without navigating hyperlinks
- Code:
 - <input type="text' name="first" id="first_txt" tabindex="1">

Completed Code

```
- <form>
  <label for="fname_txt"><b>First Name:
     </b></label> 
   <input type="text" name="fname"
 id="fname_txt" tabindex="1"> 
   <input type="submit" value="submit">
 </form>
```